

XV. *Descriptions of twelve new species of South-African Lepidoptera-Rhopalocera.* By ROLAND TRIMEN, F.R.S., &c., Curator of the South-African Museum, Cape Town.

[Read June 6th, 1883.]

THE species here described comprise one member of the *Nymphalidæ*, six of the *Lycænidæ*, two of the *Papilionidæ*, and three of the *Hesperidæ*. Seven of them will be figured in my new work on the South-African Butterflies.

The most remarkable among these new species is *Lycæna stellata*, one of the smallest of known forms, in which the ordinary pattern of the under side of the wings is in both sexes distinctly outlined in white on the very dark upper side. *D'Urbania saga* is a very distinct and interesting addition to a genus hitherto represented by a single species.

NYMPHALIDÆ.

NYMPHALINÆ.

PRECIS, *Hübner*.

*Precis Sesamus*, n. s.

Exp. al. 2 in. 5—11 lin.

Closely allied to *P. Amestris*, Drury.

Black, irrorated and transversely banded with violaceous-blue; a common discal row of conspicuous red spots. Fore wing: Basal area thickly irrorated with blue, crossed by five black streaks in discoidal cell; discal row of four red spots (surmounted near costa by two small round white spots) between two blue bands, of which the inner one is continuous and irregularly excavated along its internal edge, and the other one regular but macular; a series of bluish-white lunules along hind-marginal edge. Hind wing: Bands and basal irroration much as in fore wing, but inner blue band soon merges in basal blue, and outer one is continuous;

six or seven red spots in discal row. Under side: Glossy dark greenish bronze, with transverse fuscous striæ corresponding in position with the black portions of the upper side; a discal row of small fuscous rings (of which the third from the costa of fore wing is filled with white). Fore wing: Two lower red spots of discal row present, but much paler and less defined than on upper side. Hind wing: Basal area crossed by three or four much broken irregular fuscous striæ. Cilia, above fuscous, with white internervular markings; beneath much more obscure, especially in hind wing.

This southern representative of *P. Amestris* is readily separable by (1) its larger size, (2) its conspicuous basal blue irroration, (3) the constancy and large development of the inner discal blue band, (4) the less irregular discal row of red spots, (5) the absence of red striæ in discoidal cell of fore wing, and (6) the uniform dark bronzy-green tint of the under side, without any representation of the red spots of the upper side, except near the inner margin of the fore wing.

*Hab.* Cape Colony (Eastern Districts), Kaffraria Proper, Natal, Transvaal, and as far north as the Zambesi River.

LYCÆNIDÆ.

LYCÆNA, *Fab.*

*Lycæna lucida*, n. s.

Exp. al.  $8\frac{1}{2}$  lin.—1 in.  $\frac{1}{2}$  lin.

Allied to *L. Lysimon*, Hübn.

♂. Pale violaceous, inclining to pink; nervules more or less defined with greyish brown; cilia whitish, much obscured with brownish in fore wing, and varied with it in hind wing. Fore wing: An indistinct thin brownish disco-cellular lunule; a greyish-brown hind-marginal border of variable width, usually ill-defined inwardly. Hind wing: A hind-marginal row of six small internervular fuscous spots. Under side: Pale grey, tinged with brownish; spots of bases and discs very distinct, black, in white rings; beyond ordinary discal row a row of sagittate white marks, succeeded by two hind-marginal rows of white lunules almost forming internervular rings. Fore wing: Two spots near base, one in cell, the other below it; discal row of spots

strongly incurved on 2nd median nervule. Hind wing: A spot at base; a transverse row of four spots before middle; discal row strongly elbowed on 2nd subcostal nervule; a straight white ray runs longitudinally along radial nervule from disco-cellular terminal lunule as far as row of sagittate white marks; near anal angle, two small blackish spots enclosed by lunules of the two hind-marginal rows.

♀. Dark brown, usually more or less marked with violaceous on lower part of discs and towards bases. Hind wing: Dusky spots of hind-marginal row, as in male, more or less apparent in violaceous-marked specimens. Under side: Usually a little more brownish than in male; the spots even more distinct, and the white ray of hind wing broader.

This insect may be distinguished from *L. Lysimon* by the much more conspicuous spotting of the under side with the white ray exhibited by the hind wing. The male also differs in the decided pink tinge of the upper side, and in the absence of the dusky border of the hind wing. The female has the upper side much darker than in *L. Lysimon*, and the violaceous colouring is deeper and not of so blue a tint.

*Hab.* Cape Colony, Kaffraria Proper, Natal, and Transvaal.

*Lycæna stellata*, n. s.

Exp. al. 7—9 lin.

Greyish fuscous, with numerous subannular and other white spots arranged in correspondence with those of the under side. Fore wing: Terminal disco-cellular annulet, and discal inferiorly much-incurved band of annulets, enclose spots somewhat darker than ground colour; two similar annulets near base, one in cell, the other below it; a submarginal row of six minute white spots; cilia broad, fuscous, with narrow but very distinct white internervular interruptions, those close to apex and to posterior angle wider than the rest. Hind wing: An indistinct annulet near base below cell; other markings as in fore wing, but not so pronounced; in submarginal row of small white spots the first is considerably larger than the others; cilia broad, white, with imperfect fuscous nervular interruptions. Under side: Pale brownish grey, the white annulets enclosing

fuscous spots. Fore wing: Markings very distinct; discal row of annulets commencing about middle with two very small costal ones; submarginal row of minute white spots black-edged on both sides; fuscous of cilia paler than on upper side. Hind wing: An annulet at base; a subbasal transverse row of four annulets, that on costa enclosing a spot darker than the rest; 1st and 2nd annulets of discal band separate from succeeding ones and nearer base; submarginal row of minute white spots rather indistinct, but their inner black edges well marked, subsagittate; the 1st and 2nd of these spots are out of line with and before the others.

Like *L. lucida*, this butterfly belongs to the *Lysimon* group, both in form and in the pattern of the under side; but the upper side in both sexes is quite unlike that of any member of that group, or indeed of the genus *Lycæna*, presenting as it does, on a blackish ground, the under side pattern in finely-depicted white annulets and spots. In the total absence of blue in both sexes, and in its very small size, *L. stellata* resembles *L. Metophis*, Wallengr., and *L. Barberæ*, Trim., but its under side is altogether different, and quite wants the row of metallic-dotted ocelli so conspicuous in the hind wing of those two species.

This very remarkable little butterfly was discovered by Dr. D. R. Kannemeyer, near Burghersdorp, in the north-east of the Cape Colony, in November, 1882. He describes it as being numerous in a damp spot of a few yards in extent, flitting about low flowers in a circular direction.

*Hab.* Burghersdorp (Albert District), Cape Colony.

*Lycæna puncticilia*, n. s.

Exp. al. 1 in.—1 in.  $3\frac{1}{2}$  lin.

Closely allied to *L. Methymna*, Trim.

Dark brown, with a slightly æneous surface gloss; cilia dark brown, with rather small but very conspicuous pure white internervular spots. Hind wing: In some female examples, along hind-marginal edge, a row of minute internervular white spots, only separated from the white spots of the cilia by a blackish bounding line. Under side: Dull ashy brown; ordinary discal row of

darker white-edged spots indistinct, or sometimes obsolete, except for the thin internal white edging; adjoining the conspicuous white spots of the cilia a row of elongate-ovate white rings, usually better marked in fore wing than in hind wing. Fore wing: Spots of discal row confluent into a nearly straight fascia, slightly bent inward on median nervules; beyond this traces of a row of thin sharply-sagittate white marks. Hind wing: First and last spots of discal row ovate, black, white-ringed; other spots of row confluent, suffused; a sub-basal transverse row of three round black spots in white rings; beyond discal row a conspicuous, very acutely dentated, white transverse line composed of contiguous sagittiform marks; on hind margin, between 1st and 2nd median nervules, a small indistinct blackish spot centred with a few bluish-white scales.

Separable from *L. Methymna*, Trim., by (1) darker upper side, without any reddish tinge; (2) absence of disco-cellular lunule on upper side of fore wing; (3) darker, more ashy under side, with (4) less distinct and less macular discal row; (5) more elongate and distinctly defined white rings of hind-marginal row; and (6) more conspicuous and acutely dentated white transverse line in hind wing.

Taken in some abundance at and near Malmesbury, a village some miles to the northward of Cape Town, by Colonel Bowker and myself.

*Hab.* Cape Colony (Western Districts).

*Lycæna Bowkeri*, n. s.

Exp. al. 1 in.  $1\frac{1}{2}$ — $2\frac{1}{2}$  lin.

Allied to *L. Thespis*, Linn.

♂. Silky lilacine-blue; each wing with a rather large blackish lunular mark closing discoidal cell, and a moderately wide macular blackish hind-marginal border; cilia broad, black, conspicuously interrupted with white between nervules. Hind wing: The spots composing hind-marginal border more separated than in fore wing (especially near anal angle), and immediately preceded by contiguous thin whitish lunules. Under side: Yellowish white; each wing with disco-cellular lunule, irregular interrupted discal row of spots, and sub-marginal row of smaller subquadrate spots,—all pale

ochreous-brown, finely edged, internally and externally, with blackish; close to hind margin a row of very distinct sublunulate black spots. Fore wing: A longitudinal brown stripe from base (where it is almost black) along subcostal nervure to a little before and above extremity of discoidal cell; three small ochreous-brown spots near base (one in cell); discal row of spots abruptly interrupted on 2nd median nervule; costa from before middle to apex edged with blackish. Hind wing: Curve of costal edge close to base black; an irregular basal marking composed of three or four contiguous small ochreous-brown spots; subbasal row of three spots much as in fore wing; an additional spot on inner margin near base; discal row abruptly interrupted on 2nd subcostal nervule, and thence angulated in almost a direct line to about middle of inner margin; the 7th (and very slightly the 8th) black spot of hind-marginal row dotted with silvery blue.

♀. Only the basal and inner-marginal area of both wings, and the hind-marginal region of hind wing, lilacine-blue, the disc being white in both; terminal discocellular spot and irregular discal row as on under side, but black and strongly marked; row of violaceous-whitish lunules internally edging hind-marginal blackish spots more conspicuous than in male in hind wing, and also indistinctly marked in fore wing. Under side: As in male, but all the spots somewhat sharper and clearer in outline.

This interesting species is in the male distinguishable from *L. Thespis*, by (1) the much less vivid more lilacine-blue, and (2) much wider hind-marginal blackish border of the upper side; and in the female by (3) the much more developed discal white (especially in the hind wing) and hind-marginal lunulate markings. On the under side both sexes display (4) a whiter ground, (5) smaller and more clearly-defined markings, and (6) much more conspicuous and black spots of hind-marginal row. The tail of the hind wing is in both sexes longer than in *L. Thespis*; and in this character, as well as in those of the under side just noted, *L. Bowkeri* exhibits indications of alliance with such congeners as *L. Sybaris*, Hopff., and *L. Hintza*, Trim.

Colonel Bowker, to whom I dedicate this species, captured four examples early in the year 1881, on the

summit of a high hill overlooking the Inchanga Valley in Natal. He took two of each sex, and notes that they were flitting about the flowers of a small leguminous shrub.

*Hab.* Natal (Inchanga).

ARRUGIA, Wallengr.

*Arrugia brachycera*, n. s.

Allied to *A. basuta*, Wallengr., and *A. Protumnus*, Linn.

Exp. al. (♂), 1 in. 4—6 lin. ; (♀), 1 in. 7—9 lin.

♂. Dull fuscous-grey, with a slight ochraceous tinge ; in both wings a blackish terminal disco-cellular spot and discal row of spots (indistinct in hind wing). Fore wing : Hind-marginal area beyond discal spots darker than basal area ; between disco-cellular spot and discal spots a dull suffused space of pale grey tinged with ochraceous, radiating on the basal portion of the median nervules ; first four spots of discal row confluent and forming a costal bar as far as 3rd median nervule—the other four small, indistinct, separate, in a row inclining inwardly, between 3rd median nervule and submedian nervure. Cilia dull white, with rather narrow fuscous interruptions at extremities of nervules. Under side : Hind wing and apex of fore wing dull hoary grey. Fore wing : Basal area whitish grey, scarcely separable from discal suffused space, which is dingy whitish and much more extensive than on upper side, forming a band beyond discal row of spots ; this row and disco-cellular are very distinctly defined on the pale ground ; near base two less distinct small fuscous spots, one in cell the other below it ; outwardly edging discal dingy-whitish band a row of rather ill-defined sagittate fuscous marks ; hind-marginal border pale brownish from a little below apex. Hind wing : Irregularly reniform disco-cellular spot, and almost regular discal row of spots, very pale brownish, with a thin dark brown edging line (stronger on inner edge of row) relieved externally by a thin white line ; in basal area the traces of two highly-irregular transverse rows of broken pale-brownish spots ; a submarginal row of minute, almost obsolete, subsagittiform spots ; hind-marginal border clouded with pale brownish.

♀. Rather paler and slightly more ochraceous. Fore wing: Discal pale space less obscure, not radiating on median nervules, but extending more or less distinctly beyond discal row of spots. Hind wing: Spots not quite so indistinct. Under side: Hind wing and apex of fore wing less hoary, more brownish grey. Hind wing: Spots of basal area, except first and last of outer row, altogether obsolete; sagittiform spots of submarginal row much larger and more distinct.

The absence of yellow-ochreous colouring at once distinguishes this very dingy *Arrugia* from *A. Protumnus* Linn., and makes it more like *A. basuta*, Wallengr., which is the type of the genus.

From the latter, as far as the male is concerned, *A. brachycera* may be known by (1) its darker colouring, (2) larger and more pronounced spots, and (3) want of whitish on disc; while on the under side (4) it is considerably darker, (5) has the fore-wing spots much larger (with the marked exception of the spot near base below cell), and (6) the discal row of hind wing much broader and more regular. The female is readily recognised by (7) wanting the conspicuous white discal markings of the female *A. basuta* on the upper side. Apart from pattern and colouring, the remarkable shortness of the antennæ is very noticeable, especially in the female, where they are only about  $2\frac{1}{2}$  lines in length,—shorter than in *Protumnus*, and much shorter than in *A. basuta*.

This *Arrugia*, which I formerly regarded as a local race of *Protumnus* (see Rhop. Afr. Aust., ii., p. 279, *obs.*), is rare in collections. I found it in some abundance at Kuysna, on the south coast of the Cape Colony; and a few examples of what I consider a small dark variety of it have been taken at Cape Town. It appears in the height of summer, and delights to sit on the ground in the hottest and dustiest places.

*Hab.* Cape Colony (Western Districts).

D'URBANIA, *Trim.*

*D'Urbania saga*, n. s.

Allied to *D. amakosa*, Trim.

Exp. al. 1 in. 1 lin.

♂. Dark brown; a discal row of dull pale ochreous-yellow spots in each wing. Fore wing: Discal row of



five spots strongly incurved, so that the last spot is rather nearer base than the first one; a faint trace of a sixth spot just below 1st median nervule; a row of three small and very indistinct spots of the same colour a little beyond and parallel with upper part of discal row; at extremity of discoidal cell a scarcely visible ochreous-yellow spot, preceded by a similar not quite so indistinct spot in cell. Hind wing: Discal row of five spots less distinct than in fore wing, not curved, but rather irregular; the 1st and 2nd spots sublinear and confluent, the last minute (below 1st median nervule). Cilia of both wings dark brown, interrupted with white between nervules. Under side: Dark brown, variegated with whitish. Fore wing: 1st spot of discal row small, white, the remainder larger than on upper side and of a paler yellow; in discoidal cell a longitudinal whitish streak from base and a terminal whitish spot; between extremity of cell and discal spots a transverse row of three short whitish rays; spots beyond discal row distinct, white; three or four small white marks between nervules on costal edge beyond middle. Hind wing: A conspicuous, irregular, white, discal stripe, well defined internally but not externally, and very sharply angulated on radial nervule; before discal stripe the following whitish marks, *viz.*, one on costa at base, one in discoidal cell at base, and another just before extremity of cell; and an interrupted transverse row of very indistinct spots before middle; between discal stripe and hind margin a row of thin internervular lunules.

From *D. amakosa*, Trim., this species is at once distinguished by (1) the conspicuous sharply-angulated white stripe on the under side of the hind wing. Other differences are (2) the want of whitish irroration generally on the under side; and on the upper side, (3) the more sharply incurved discal row of spots in the fore wing, and (4) the not incurved and more irregular row in the hind wing. A distinction is also perceptible in the form of the wings, as (5) they—especially the fore wings—have a much less curved costa and more produced apical region.

Only a single specimen of this interesting *D'Urbania* has come under my notice. It was taken by Mr. L. Péringuey, of Cape Town, in January, 1882; on the Ilex River Mountain, in the Worcester district of the

Cape Colony. Mr. Péringuey informs me that this individual was in company with another larger butterfly, which he thinks was most probably the female, but which he did not succeed in capturing.

*Hab.* Cape Colony (Western Districts).

PAPILIONIDÆ.

PIERINÆ.

PIERIS, *Schr.*

*Pieris Ogygia*, n. s.

Allied to *P. Zochalia*, Boisd., and *P. Calypso*, Dru.

Exp. al. (♂), 2 in. 1 lin. ; (♀), 2 in. 6½ lin.

♂. White, with black markings. Fore wing: Costa edged very narrowly with black; base with a slight pearly gloss; at extremity of discoidal cell an oblique, angulated, transverse streak, wider in its lower portion; a rather narrow apical and hind-marginal border (widest at apex), rather sharply indenting the white on nervules, ending abruptly on 1st median nervule; at extremity of submedian nervule a small spot, quite separate from hind-marginal border; immediately before border four rather small spots, of which three form an oblique row from costa (the 1st touching apical border), and the 4th is between 2nd and 3rd median nervules and rather indistinct. Hind wing: On hind margin six nervular spots, all (except that at end of submedian nervule, which is small and almost linear), large, subovate, well separated. Under side: Hind wing and apex of fore wing pale chrome-yellow; nervures of hind wing universally black. Fore wing: In upper part of cell, for a little distance from base, a flush of orange; discocellular terminal streak fainter than on upper side, commencing a little further from costa; four submarginal spots distinct; apical yellow extending narrowly to about middle of hind margin; a hind-marginal row of seven small, inwardly-acuminate, nervular, black spots. Hind wing: Costa, from base to before middle, edged with orange-red; a submarginal row of seven small, subsagittate, black, internervular spots, of which the middle or 4th one is very small; hind-marginal spots all smaller than on upper side (except that at end of submedian nervule, which is larger), narrow, subrhomboidal, well separated; a faint blackish dot on each

side of 1st median nervule near its origin; on fold between median and submedian nervures, for a little distance from base, a very faint orange streak.

♀. Similar to male, but considerably larger. Hind wing: A submarginal row of five small blackish spots, corresponding to the subsagittate spots of the under side, but wanting the first and last spots. Under side.—Fore wing: Flush of orange at base wider. Hind wing: A black line marks middle part of fold between median and submedian nervures.

Partaking of the characters of both *P. Calypso*, Drury, and *P. Zochalia*, Boisd., this butterfly is on the whole nearer to the latter, especially as regards the female. It is distinguished from *Zochalia* by having in the fore wing (1) a narrower, more angulated, disco-cellular streak, and (2) a much narrower apical and hind-marginal border, enclosing no white spots; and in the hind wing (3) much rounder hind-marginal spots, not acuminate inwardly or united by the festooned line often found in *Zochalia*. On the under side (4) the yellow ground is much brighter; (5) the fore wing has a basal flush of orange, and (6) only four separated submarginal spots instead of a continuous band; while in the hind wing (7) the nervures are much more narrowly black, and (8) the cellular striæ and festooned submarginal line are wanting.

From *Calypso* this species is readily separated by its smaller size and much narrower black border of the fore wing; as well as, on the under side, by its black nervures and very much smaller submarginal black spots of the hind wing, and the want in the same wing of the large terminal disco-cellular spot. The female has no resemblance to that of *Calypso*, which has a broad dusky border and ground suffused with yellow and grey; much like those presented by the darker females of *Gidica*, Boisd.

I have only seen one example of each sex. The male was sent to me by Mr. Walter Morant in 1869, that gentleman writing that he believed it was captured near Pinetown, Natal, where he was resident at the time.

The female was taken at D'Urban, in the same Colony, by the late M. J. McKen in the year 1866.

*Hab.* Natal (Coast Districts).

TERACOLUS, *Swains.**Teracolus Bowkeri*, n. s.

Allied to *T. Agoye*, Wallengr.

Exp. al. 1 in. 6—7½ lin.

♂. White, with yellow-ochreous apical patch in fore wing. Fore wing: Base and costa sparsely irrorated with black; apical patch internally irregularly bordered with black, which is broad in its middle part (and sometimes also in its upper part), but attenuated and usually ill-defined towards its extremities; a narrow ray of clear yellow ochreous immediately beyond the black, but the rest of apical patch tinged with greyish. Hind wing: Base irrorated with black, more widely and rather more closely than in fore wing; a longitudinal ray of black irroration on costa beyond middle, its outer extremity sometimes strongly marked; subcostal nervules very rarely thinly defined with black; in some specimens a few black atoms scattered about disc. Under side: Hind wing and apical area of fore wing very faintly tinged with yellowish. Hind wing: Costa very narrowly edged with chrome-yellow from base to a little beyond middle; a general very fine and very sparse irroration of dusky atoms.

♀. Fore wing: Apical patch fuscous-brownish, darker inwardly, traversed mesially by a dull yellow-ochreous ray, which is sometimes suffused and ill-defined; base more widely irrorated than in male. Hind wing: beyond middle, from costa, a transverse row of three ill-defined dull-fuscous spots, the first of which represents the termination of the black costal irroration in the male. Under side: Yellowish colouring much more decided than in male. Hind wing: Fine dusky irroration closer than in male.

This little species is to be distinguished from *T. Agoye*, Wallengr., as far as the male is concerned, by (1) the larger, paler, less warmly-tinted apical patch of fore wing; (2) total or almost total absence of black nervules in both wings; (3) want of copious black irroration in fore wing; and (4) presence of strongly-marked irroration ray on costa of hind wing; while (5) the under side is somewhat more yellowish. The female has (6) a much larger apical patch, owing to the breadth and extension inferiorly of the fuscous-brown on its inner border; but

(7) wants the disco-cellular terminal spot presented by *Agoye* female in both wings; (8) the under side is duller in tint, and wants both the disco-cellular spots and the tinge of pale yellow at the base of the fore wing.

Colonel Bowker, after whom I have named this butterfly, took a solitary male of it in Basuto-land; and in 1871 sent me a second example of the same sex from Hope Town, on the Orange River. Later in that year he forwarded a male and four females from the Vaal River. On the 6th September, 1872, I captured a male at Kolberg, in Griqualand West. The only other specimen I have seen was a male, received in 1879, taken by Mrs. Barber on the Vaal River.

*Hab.* Cape Colony (Northern and North-Eastern Districts).

#### HESPERIDÆ.

#### PYRGUS, *Hüb.*

#### *Pyrgus Tucusa*, n. s.

Allied to *P. Mohozutza*, Wallengr., and *P. Châca*, Trim.

Exp. al. 1 in.—1 in. 3 lin.

♂. Fuscous, with semi-transparent white spots. Fore wing: From base to before middle, along costa, median nervure, and inner margin, some yellowish white irroration; at extremity of discoidal cell two elongate spots one above the other; a discal continuous row of nine spots, strongly curved outwardly in its upper portion, but thence sharply deflected inwardly to submedian nervure a little beyond middle; of this row the 7th is the largest spot, and the 8th the smallest; close to upper part of hind margin a row of fine, almost obsolete, dull fulvous-ochreous spots. Hind wing: Median and submedian nervures clothed with dull yellowish white scales and hairs; at extremity of cell an ill-defined whitish spot. Cilia white, with narrow fuscous nervular interruptions,—those in hind wing almost obsolete. Under side: Dull creamy white, varied with very pale fulvous, and with small black spots. Fore wing: White spots as on upper side, and edged with fuscous; inner-marginal area pale fuscous; hind-marginal border creamy, faintly tinged with fulvous, becoming macular towards posterior angle; along hind-marginal edge a row of small internervular black spots. Hind wing: A thin costal edging

near base, discoidal cell and a small space beyond, and a widish hind-marginal border, very pale fulvous; five small black spots near base, of which two are in cell; two parallel discal rows of small black spots, seven in each row; inner-marginal fold tinged with fuscous at its broad anal-angular extremity; hind margin thinly edged with fuscous, interrupted (like the fulvous border) by nervules of the ground colour.

♀. Fore wing: White spots inclining to creamy, all smaller than in male (especially the 7th, while the 8th is wanting or exceedingly minute); hind-marginal spots distinct, pale fulvous-ochreous, seven in number. Hind wing: Disco-cellular spot large, pale fulvous-ochreous; close to hind margin a row of seven spots of the same colour, not extending below submedian nervure. Cilia creamy white, with wider fuscous interruptions (in hind wing only at extremities of median nervules). Under side: As in male, but the fulvous markings much brighter. Hind wing: Two additional fulvous marks immediately before inner discal row of black spots, *viz.*, one between costal and subcostal, the other between median and submedian, nervures.

In size this *Pyrgus* is nearer to *P. Mohozutza*, Wallengr., but in pattern to *P. Chaca*, Trim. From the former both sexes constantly differ in (1) the continuous character of the discal row of white spots, due to the presence of two spots between the costal three and those below median nervure. The male is further separable by (2) the purer white of the discal spots and the cilia, and (3) by the obsolete condition of the hind-marginal ochreous spots. On the under side both sexes present in the hind wing (4) a regular inner discal row of seven black spots instead of the three or four widely-separated and irregularly-placed spots in *Mohozutza*; (5) paler (and on costa and submedian nervure much reduced) fulvous markings; and (6) a whitish instead of fuscous inner-marginal fold. Apart from its very much smaller size, *Tucusa*, in both sexes, is very like *Chaca* on the upper side; but on the under side it wants entirely the broad transverse median fulvous band and fulvous base, separated by a creamy black-edged band, so conspicuous in *Chaca*.

Mr. H. Barber first sent me examples of this species, which he took in the Transvaal country in 1873. Several

others were given to me by Mr. J. M. Hutchinson in 1881, with the information that he had taken them near Estronet, in Natal.

*Hab.* Natal (Upper Districts), and Transvaal.

THYMELICUS, *Hüb.*

*Thymelicus Wallengrenii*, n. s.

Closely allied to *T. niveostriga*, Trim.

Exp. al. 1 in. 2—4 lin.

♂. Dull brown; the hind wing much darker, almost fuscous; fore wing with almost transparent disco-cellular terminal spot and six discal spots. Fore wing: Spot at extremity of cell divided by disco-cellular fold; first three spots of discal row minute but distinct, forming a thin outward-curving costal ray about midway between disco-cellular spot and apex; other spots of discal row larger, forming a strongly inward-curving row between third median nervule and submedian nervure—the middle spot of these three being the largest, subquadrate, and immediately below disco-cellular spot. Hind wing: Spotless. Cilia broad, dusky whitish. Under side: Hind wing and costa and apical area of fore wing pale ochreous-brown, with a reddish tinge. Fore wing: Spots as on upper side, except that those in costal part of discal row are usually less distinct and sometimes obsolete; a hind-marginal whitish cloud over lower part of ochreous-brown of apical area. Hind wing: A very conspicuous, rather broad, white longitudinal stripe, commencing at a little distance from base and running along disco-cellular fold to hind margin; a duller, much less conspicuous, wider whitish stripe along inner-marginal edge; space of inner-marginal fold brownish grey.

♀. Paler, duller; hind wing not darker than fore wing; spots of fore wing rather larger, the three lower ones of discal row more widely separated from each other. Under side.—Hind wing: Grey of inner-marginal fold paler; inner-marginal white stripe very narrow and ill-defined; on disc the minute traces of a row of whitish spots.

From *T. niveostriga*, Trim., this species may at once be recognised by (1) the conspicuous longitudinal central white stripe on the under side of the hind wing. Other

distinctions are (2) three spots instead of two in costal part of discal row; and on under side (3) the nervures not paler than the ground colour; (4) the whitish cloud on hind margin of fore wing; and (5) the dull and ill-developed state of the inner-marginal white stripe of the hind wing, which in *niveostriga* is shining pure white.

It gives me much pleasure to name this new butterfly in honour of Pastor H. D. J. Wallengren, the distinguished Swedish lepidopterist, whose good fortune it was to be the first to make known to Science a large number of the South-African Rhopalocera.

Like so many other novelties among the *Hesperidæ*, this curious *Thymelicus* rewarded the unremitting researches of Colonel Bowker, who discovered it in Zululand in 1880. Later in the same year he sent an individual taken at the Biggarsberg in Natal.

*Hab.* Natal (Upper Districts), and Zulu-land.

#### NISONIADES, *Hüb.*

##### *Nisoniades phyllophila*, n. s.

Nearly allied to *N. Nottoana*, Wallengr.

Exp. al. 1 in. 5—7 lin.

♀. Pale reddish brown, with fuscous and transparent spots. Fore wing: A central band of seven fuscous-edged transparent spots, disposed thus, *viz.*, an outwardly oblique row of three between costa and median nervure (of which the 2nd and 3rd—larger than the 1st—are in discoidal cell), and an inwardly oblique row of four between 3rd median nervule and submedian nervure (of which all are small but that between 2nd and 1st median nervules, which is quadrate and much the largest in the entire row of seven); near apex a short outwardly oblique costal row of four small transparent spots, of which the first and last are minute; between the extremity of this subapical row and the 4th spot of the median row, two fuscous spots, sometimes enlarged and elongated longitudinally; before middle, between median and submedian nervures, a rather indistinct fuscous spot. Hind wing: A transverse row of three widely-separated fuscous spots before middle, one of which (at extremity of discoidal cell) is more indistinct than the others; beyond middle a strongly-curved transverse row of seven fuscous spots, of which the first next



costa is much the largest, and the 2nd and 3rd are larger than the remainder; along hind margin, except near apex, a narrow irroration of whitish scales, more developed towards anal angle. Cilia in fore wing reddish brown, except in concavity just above posterior angle, where it is white; in hind wing white, except towards apex, where it is brown. Under side: Markings mostly as on upper side; brown of fore wing paler; hind wing white, broadly bordered with brown costally and apically. Fore wing: Fuscous spot before middle faint, but marked with two subvitreous dots; two fuscous spots beyond middle obsolete or very faint. Hind wing: Costal brown narrow at and close to base, but very broad beyond middle and in apical area; lowest spot of transverse row before middle (and often also 5th spot of row beyond middle) obsolete.

This form is very near the female of *N. Nottoana*, Wallengr., but easily to be distinguished by (1) the conspicuous white field of the under side of the hind wing, and (2) the whitish irroration of the hind margin of the same wing on the upper side. Both these characters approximate the insect to *N. Flesus*, Fab., but it differs widely from the latter in its much smaller size, as well as in the number, shape, and relative size of both the transparent and fuscous spots. The nine specimens before me all appear to be females, but four of them are too much injured for any determination of their sex.

For many years I had but a single specimen of this butterfly, and regarded it as a possible sport of the female *Nottoana*. Another was sent, after a long interval, from D'Urban, Natal, by the late Mr. McKen; but Colonel Bowker has on different dates during the last four years forwarded from the same locality as many as seven examples. The Hewitson Collection in the British Museum contains six specimens, recorded as received from Delagoa Bay.

*Hab.* Natal (Coast Districts), and Delagoa Bay.